

ABSTRACT OF THE DISCLOSURE

The present invention relates to a one-time programmable memory cell and a method of setting a state for a one-time programmable memory cell. The memory cell includes a storage element adapted to store data and two thin gated fuses coupled to the storage element, adapted to set the state of the memory cell. A level shifter device is connected to the gated fuses and is adapted to stand off a high voltage when setting the state of the memory cell. At least one switch transistor is connected to at least the level shifter device and is adapted to select at least one of the gated fuses, enabling a high voltage to be communicated thereto, thus setting the state of the memory cell. A programming device is coupled to the storage element and is adapted to keep at least one of the gated fuses low when setting the state of the memory cell.